

Date: Monday, 7/30/2007 1:52:22 PM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services ✓
Job Number : 33778 7
Estimate Number : 10495
P.O. Number :
This Issue : 7/30/2007 S.O. No. :
Prsht Rev. : NC
First Issue : 1/1 Type : MACHINED PARTS
Previous Run : 31884
Written By :
Checked & Approved By : 07.07.30
Comment : est rev H 07.06.12 ecn 825 EC

Drawing Name : LITTER TIE DOWN ASS'Y (LOCKING) - UNDER REVIEW
Part Number : D2360
Drawing Number : D2360REVD, D2341REV F
Project Number : N/A
Drawing Revision : D1 A F
Material :
Due Date : 8/12/2007 Qty: 8 Um: Each

07.07.31
8.10
8.

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D6201 T Extrusion 4X4X3/8



Comment: Qty.: 1.1067 f(s)/Unit Total : 4.4268 f(s)

Material: D6201 (6061-T6 (QQ-A-200/8) 4" x 4" x 3/8" Thick 'T' extrusion)

Batch: 13 26538 / 38" B 21367 / 35" 07/12/04

B 35952 X10

2.0 BAND SAW BAND SAW



Comment: BAND SAW

Cut blanks: 12.65" Long

07/12/04 18

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

Machine as per Folio D2341 and Dwg D2341

SA 01.12.12 8

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SA 07.12.12 8

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

07/12/12 2

6.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

Deburr and Tumble

SA 01.12.12 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Process Sheet

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Job Number: 33778

Part Number: D2360

Job Number:



Seq. #:

Machine Or Operation:

Description:

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

N/A

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

MJ

07-12-17

(X8)

9.0

POWDER COATING

POWDER COATING



M 10 5914



(8X)

Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M-F

07/12/17

10.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



JS



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

07-12-17

(X8)

11.0

D2002015

Knob



MF



Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)

Knob

B16177B (16)

12.0

D2345

Lock Channel

24



29144



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Lock Channel

B36577 (4)

13.0

D2366

Lock Handle

24



31955



Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)

Inventory

B36576 x12mx

14.0

D2367

Handle Knob



B33794



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Inventory

7/12/17 SP (82)

W/O:		WORK ORDER CHANGES					
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QA: N/C Closed: _____ Date: _____

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Job Number: 33778

Part Number: D2360

Job Number:



Seq. #:

Machine Or Operation:

Description:

15.0

D2372

Quick Release

→ b

Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)
Quick Release

②

31924, B 36698 x 14 mf

08-01-18

16.0

D2373

Spring



26458 SP

Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)
Spring

17.0

D2444

Pip Pin Assembly



B 35206

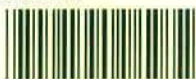
Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)
Pip Pin Assembly

SD

18.0

AN526C1032R18

Screw



M4523

Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)
Screw

SD

19.0

AN960JD10

Washer



M105792

Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)
Washer

SD

20.0

AN960JD10L

Washer



M104374

Comment: Qty.: 8.0000 Each(s)/Unit Total: 32.0000 Each(s)
Washer

SD

21.0

MS20470AD34

Rivet, Universal Head



M15541

Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)
Rivet, Universal Head

SD

22.0

MS21042L3

Nut



M105558

Comment: Qty.: 3.0000 Each(s)/Unit Total: 12.0000 Each(s)
Nut

7/12/17 SP

(8X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

MS27039113

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)
Screw

M13719

SP

24.0

MS27039115

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)
Screw

M104156

SP

25.0

NAS679A3W

Nut



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)
Nut

M1469

7/24/07 SP (88)

26.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble as per dwg D2360

mf 08-01-18

(8)

27.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

AS 6 08/01/18 (88)

28.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: ST 185

AS 08/01/18 (88)

29.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

AS 08-01-21

Job Completion



u 08-01-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	33778
Description: Litter Tie Down Bracket (Locking)		Part Number:	D2341
Inspection Dwg: D2341 Rev: F		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.500	+/-0.010	1.506	/			
1.000	+/-0.010	1.005	/			
Ø0.242	+0.005/-0.001	Ø.242	/			
Ø0.191	+0.005/-0.001	Ø.192	/			
R0.250	+/-0.010	R.250	/			
1.700	+/-0.010	1.693	/			
0.750	+/-0.010	.755	/			
2.750	+/-0.010	2.757	/			
11.000	+/-0.005	11.004	/			
5.500	+/-0.010	5.504	/			
1.584	+/-0.010	1.588	/			
Ø0.191	+0.005/-0.001	Ø.192	/			
2.610	+/-0.010	2.615	/			
0.844	+/-0.010	.843	/			
1.250	+/-0.010	1.255	/			
0.750	+/-0.010	.754	/			
12.500	+/-0.010	12.504	/			
3.313	+/-0.010	3.314	/			
4.250	+/-0.010	4.250	/			
0.400	+/-0.010	.400	/			

Measured by:	SA
Date:	01.12.12

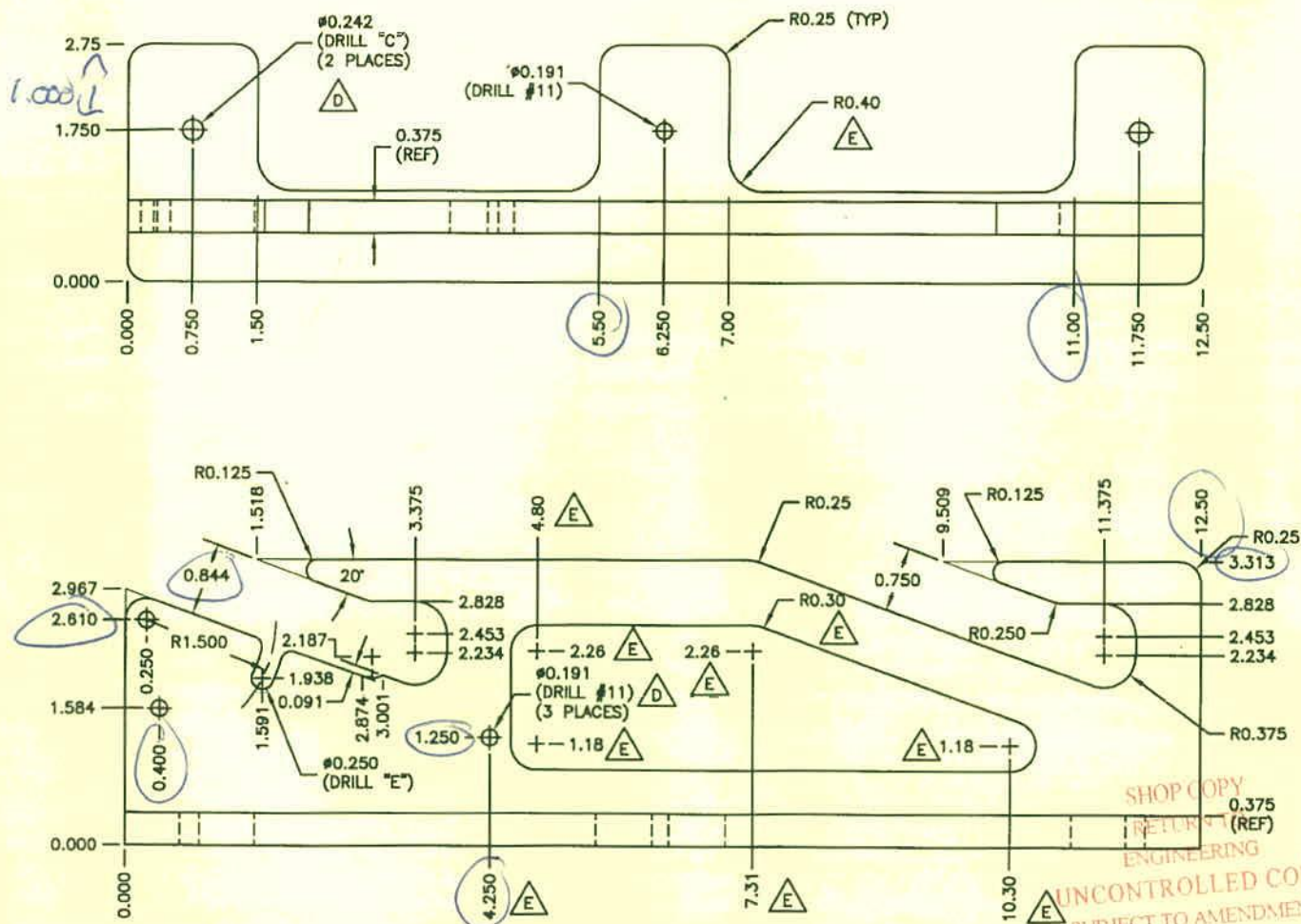
Audited by:	S.F.
Date:	01/12/12

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.05.24	New Issue P/O D2360	KJ/JLM	
B	07.07.17	Dwg Rev. updated	KJ/JLM	AF

DART

DESIGN BW	DRAWN BY BC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED B	APPROVED H	DRAWING NO. D2341	REV. F SHEET 1 OF 1
DATE 07.06.07	TITLE LITTER TIE DOWN BRACKET (LOCKING)		SCALE 1:2
A	95.01.13	NEW ISSUE	
B	95.02.14	MODIFIED LOCK	
D	95.02.20	CHANGES TO DIAMETERS	
E	97.10.01	CHANGES FOR MACHINING	
F	07.06.07	REVISED NOTES; FINISH WAS ANODIZE	

**D2341 LITTER TIE DOWN BRACKET (LOCKING)**

- 1) MATERIAL: MAKE FROM D6201-0125 EXTRUSION (6061-T6/T651 PER QQ-A-200/8)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (REF. 4.3.5.1) PER QSI 005 4.3
- 3) BREAK ALL SHARP EDGES TO 0.005 TO 0.010
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFY WITH DART P/N "D2341" USING FINE POINT PERMANENT INK MARKER

F

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WITHOUT NOTICE
WORK ORDER
NO 33718
RELEASED
07.06.22

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DART

DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CE	APPROVED [Signature]	DRAWING NO. D2360	REV. D SHEET 1 OF 2
DATE 07.06.06		TITLE LITTER TIE DOWN ASSEMBLY (LOCKING) NTS	
A	95.02.10	NEW ISSUE	
B	95.02.20	RE-DESIGN	
C	97.08.27	ADD MS20470AD3-4 RIVET	
D	07.06.06	D2002-015 WAS D2376; SECTION B-B QTY(2) AN960JD10 WAS QTY(3) QTY(8) AN960JD10L WAS QTY(5)	

RELEASED

07 06 07

PARTS LIST:

QTY	PART NUMBER	DESCRIPTION
X	D2360	LITTER TIE DOWN ASSEMBLY (LOCKING)
1	D2341	LITTER TIE DOWN (LOCKING)
1	D2345	LOCK CHANNEL
2	D2366	LOCK HANDLE
1	D2367	KNOB (DELRIN)
2	D2372	QUICK RELEASE FASTENERS
1	D2373	SPRING
2	D2002-015	KNOB (DELRIN)
1	D2444	PIP PIN
1	AN526C1032R18	SCREW
2	AN960JD10	WASHER
8	AN960JD10L	WASHER
1	MS20470AD3-4	RIVET
3	MS21042L3	NUT (OR MS21042-3)
1	MS27039-1-13	SCREW
2	MS27039-1-15	SCREW
1	NAS679A3W	NUT

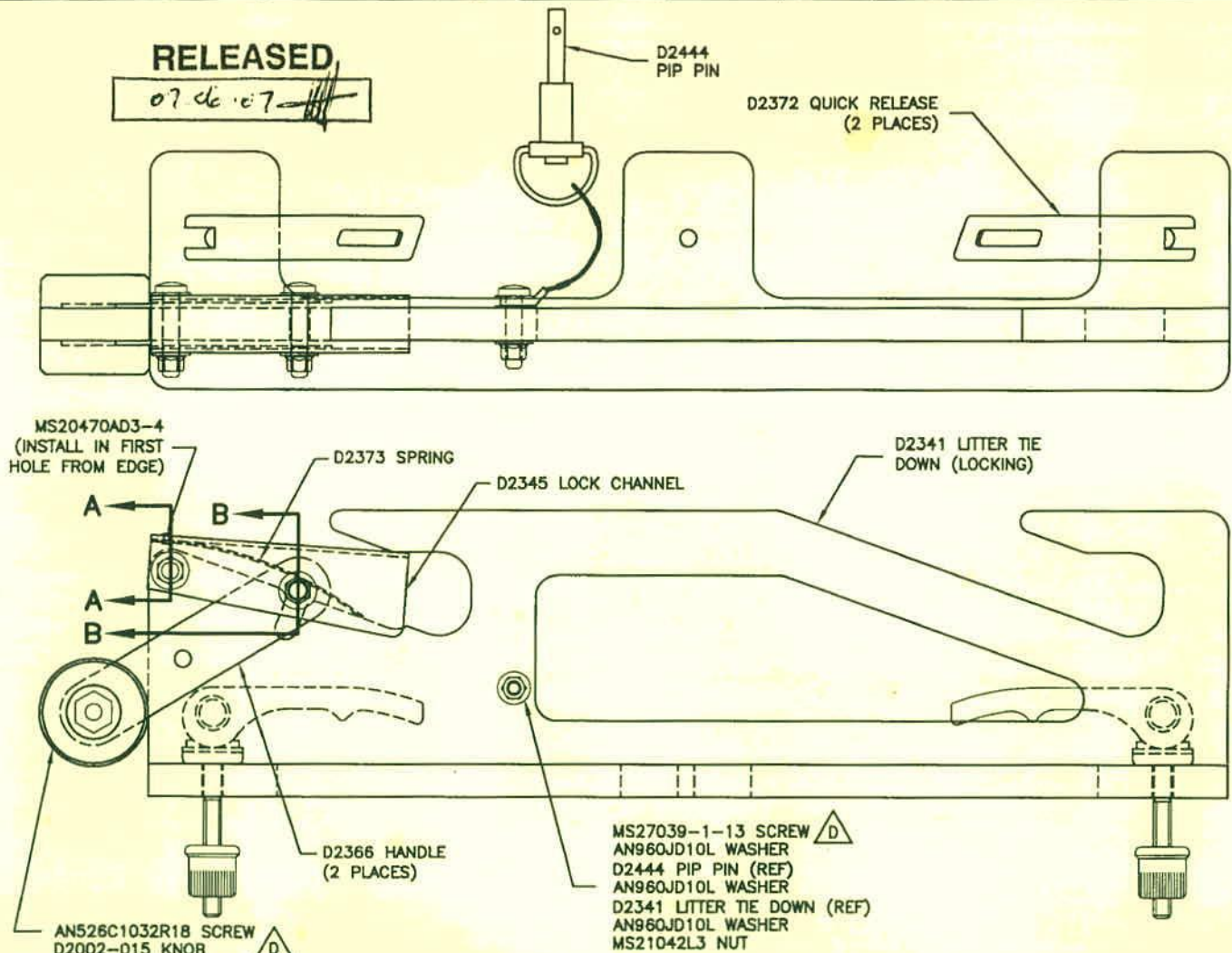
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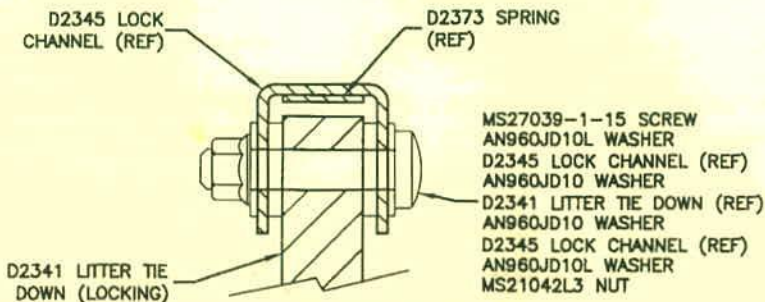
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DART

DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED H	DRAWING NO. D2360	REV. D SHEET 2 OF 2
DATE 07.06.06	TITLE LITTER TIE DOWN ASSEMBLY (LOCKING) NTS		



D2360 LITTER TIE DOWN ASSEMBLY (LOCKING)



SECTION A-A
(SCALE 1:1)



SECTION B-B
(SCALE 1:1)

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